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SCHOLASTIC

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COACHES' CORNER NEW BOOKS ON THE SPORTSHELF......

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Editor: OWEN REED Assistant Editor: H. L. MASIN

SCHOLASTIC COACH is issued monthly tan times during the academic year (September through June) by Scholastic Corporation, M. R. Robinson, president. Publishers of Scholastic, the American High School Weekly; issued in two editions, oas for students and one for teachers.

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Basketball ABC's

AN ILLUSTRATED WORKING COURSE FOR COACHES AND PLAYERS By EVERETT DEAN and BILL ANDERSON Two Championship coaches, Everett Dean of Stanford University and Bill Anderson of Lower Merion High School, Ardmore, Penn., have written the newest Keds Sports Bulletin, "Basketball," No. 6 in the Keds Sports Library. Bill Anderson is one of the most successful high school basketball coaches in the land. His teams at Lower Merion have won four state championships. His quintets are smart, versatile performers, but it's their deft ball-handling and mastery of fundamentals that make them click. He writes about Passing and Shooting. Everett Dean has been an amazingly successful

Everett Dean has been an amazingly successful coach for 28 years. At the University of Indiana, he turned out several Big Ten champions and won nation-wide recognition as a developer of talent. In 1942, his Stanford quintet won the national collegiate championship. Dean has few equals as an organizer of team offense. He covers Individual and Team Offense and Defense.

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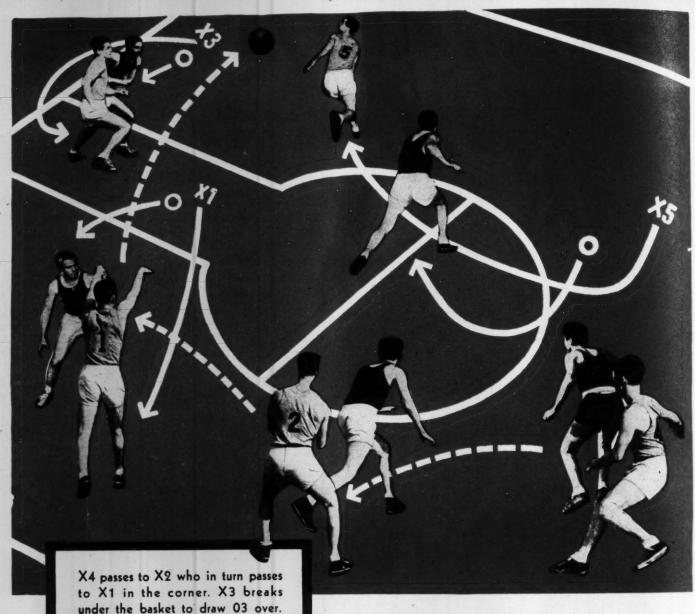
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SCORING PLAYS CLICK ON SEAL-O-SAN FLOORS

I F your offense is bedeviled by a slippery gym floor, a Seal-O-San finish will act like a stimulant.

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floor to X5 who shoots a set-shot.

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This year make sure your scoring plays click. Put mopapplied Seal-O-San on your gym floor now and watch your team "zip-and-go." 5350 Seal-O-San coaches will tell you its your first move for a successful season.

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THERE IS ONLY ONE PROVEN IDEAL GYMNASIUM FLOOR FINISH . . . ITS NAME IS SEAL-O-SAN

Here Below

E'RE awarding Harold
"Red" Hastings of Austin,
Minn., his major "F" for
the nicest football story of the year.
The incident occurred in the Grand
Meadows—LeRoy schoolboy game,
which "Red" refereed.

LeRoy, who entered the game unbeaten, piled up 13 points in the first half. Grand Meadows then started to roll. They pushed over a touchdown in the third quarter, but missed the extra point; then scored again late in the last quarter, making the score 12-13.

The moral-victory tie or the loss thus fell squarely on the extra point. They elected to try for it with a spinner. LeRoy converged on the carrier and his interference, burying them in a mountain of flesh. "Red" dove into the pile, untangled them and saw the ball just touching the goal line.

He was about to signal the point good when Paul Grimes, the half-back who carried the ball, looked up and said: "Don't count it, sir, I crawled—the ball was a few inches short."

You could say the kid was silly, that he was entitled to anything he could get away with. But in the words of "Red" Hastings, "Wouldn't it be wonderful if every young athlete were like that fine, honest kid!"

ONE of the schoolboy basketball teams we're going to keep our 40-40 eyes on this year is Lower Merion High School in Ardmore, Pa. They'll be shooting for their fourth straight state title! If they make it, they will set a new national record. At least, so far as we know.

Has anybody ever won four in a row? We know that Passaic, N. J., High ran up a neat 159-game winning streak from 1922 to 1926. But we're not sure about how they fared in the state tournaments, or whether they even entered them.

The generalissimo of the Lower Merion forces—Bill Anderson—is quite a fellow. If he hasn't the tidiest coaching record around, show us someone with a better one. Over the past 14 years, in a very tough league, he's won 283 games and lost 33, for a 90% average. This includes 4 state, 7 Eastern State and 11 District champion-ships!

If any further testimonial were needed as to Mr. Anderson's ability as a teacher, there is the success of his pupils as coaches. Some years ago, Jack Hinchey, co-captain of his 1933 state champions, took over the coachship at West Conchohocken and won a league title in his first year.



Hinchey then went to Glen Nor and again produced a winner. Upon moving to Ridley Township, Uncle Sam's "Greetings!" caught up with him, whereupon Ridley, on Hinchey's recommendation, hired Hugh Wynn, another Lower Merion product. Yep, Wynn preserved the Anderson legend by piloting the team to a championship.

IF YOU'VE been keeping a score card on the Navy-Axis game, you probably know about the homers the U.S.S. Card—a squat baby flat-top—has been bopping

against the Nazi submarines. A couple of weeks ago, the Card and her task unit were awarded Presidential Unit Citations for "destroying more submarines than any team in naval history."

In the best St. Louis tradition, the "Card"-inals are a rough, tough, hard-hitting outfit. How do we know? Just look at the front cover. That's the Card's crew you see warming up for a little submarine sinking. Just another illustration that sport is a valuable Card in the deck.

In The bleak, lonely military outpost in the Aleutians, our soldiers are isolated from every vestige of civilization, except that which they bring themselves. There, of all places, then, is a perfect testing grounds for the value of sports in maintaining morale and providing recreation for fighting men.

That sports are coming through with flying colors is attested to by Captain Maurice M. Witherspoon, a Navy chaplain since 1918. Captain Witherspoon, who was a great tackle at Washington & Jefferson in 1914-15, commanded 30 athletic officers at the Aleutian base and thus knows whereof he speaks.

He revealed that our boys were playing softball on the Attu beaches before the last Japs were blasted from their foxholes; and that everywhere in the Alaskan sector athletic equipment is sent to the soldiers and sailors as soon as they have been provided with food, clothing and war material.

"During battle conditions," he says, "the men have no need of sports. But there is no substitute for them when the enemy is not being engaged. They provide excellent safety valves for excess energy.

"Alaskan tundras, the most depressing terrain in the world, do not make the best playing surfaces for football and soccer, so that games of agility and speed like volleyball and softball on small sandy areas are preferred."

Most of the activities at advanced bases are carried on in structures called Cowan huts. They are made of strand steel and are 40 by 100 feet and 25 feet high. They are fine for basketball, badminton and table tennis.

Basketball ranks first in popularity. As many as 64 teams competed in a recent Dutch Harbor tournament. Next in order comes softball, fishing, table tennis, bowling, which affords great amusement for both players and spectators; volleyball, pool, badminton, and touch football; even weight-lifting has a following.



By L. B. ICELY, President

In every school, college, gymnasium and field house you see certain signs of victory today.

You saw them long before the war began, but you did not recognize them. They are America's youth engaged in America's great body, heart, muscle and nerve-building competitive sports. Today it is basketball with its speed, agility, quick thinking, coordination, muscle control and stamina.

A few weeks ago it was rugged man-making football—and those great developers of agilities, skills and stamina, baseball and tennis.

These and other great competitive American sports are signs of victory. They are signs that America's fighting sons are coached and trained to understand competition—to fight to win—to refuse to give up until the last winning point has been scored. And that way lies victory.

Today millions of our American youth—famous American college, school and professional athletes among them—are showing these signs of Victory on the battlefields, in the air and on the high seas for the whole world to see. Together with the brave sons of our Allies they will outsmart, outlast and outscore the enemies of Freedom.

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THE "BUCKET" MAN AS A SCREENER

By Dave Tobey

A teaching manual and play catalog for pivots, compounded of front, rear and lateral screens

Dave Tobey, one of the greatest basketball officials of all time, and author of the current text, "Basketball Officiating," is a physical education instructor at De Witt Clinton High School, New York City. He formerly coached the basketball varsity at the Savage School for Physical Education (college), where he was leading scorer of the undefeated 1917-18 team; and up until this year tutored the strong St. Ann's Academy (N. Y. C.) quintets. In 25 years as a coach, he never had a losing season.

CREENING is as old as basketball itself. The early professionals were masters at it. But they blocked more often than they screened.

The defense did little complaining. Anticipating the maneuver, they would clear out or elbow the screener. The rough stuff had two objectives-protection and intimidation of the screener. A dig in the side or a "massage" with swinging elbows tended to discourage the pick-off, unless the blocker was very artful at it. It was a case of the survival of the fittest. If you couldn't give and take, you didn't last long.

The most significant change in modern screening is that the burden lies on the offense. The screener must give the defensive player at least three feet leeway at the time of the play. Hence, running a guard into the "bucket" (pivot or post play) calls for unusual cleverness.

The bucket is usually a tall, husky man who sets up his post at a strategically located spot on the floor. Many old timers will recall this type of player. Andy Shields, "King John" Wendelken, both of the Original 23 St. Y.M.C.A. (N. Y.); Ed Wachter, of Troy, former Harvard coach; Dave MacMillan, of the Knickerbockers, and present coach at the University of Minnesota; and, in the early 20s, Lank Leonard, of the Whirlwinds and Celtics, and Dutch Dehnert and Joe Lapchick, of the Celtics, the latter the present St. John's coach, were a few of the tall players who popularized the power type of screen.

Dutch Dehnert introduced the play. Contrary to popular belief, it was not a startling discovery. As Nat Holman writes in Winning Basketball, it came about "through evolutionary change, though the final result was both startling and original. The Celtics made constant and important use of a play in which one man moved slowly across

the foul-line territory near his own basket, received a pass, and made a quick return play. This might be termed a moving pivot play. However, the player moving across the court, either by accident or through an economy of movement, finally came to stop at the foul line, where he stationed himself firmly, received passes from his teammates, and made himself the central point in the offensive orbit."

Before pivot play was restricted in the free-throw lane, practically every team used the screen attack, and a premium was placed on tall players who could act as the hub or key man. The unrestricted pivot rules gave a distinct advantage to the offense, affording a variety of plays to penetrate close-knit defenses.

The tall players mentioned, when

A series of 20 good screen plays for all situations will be found on pages 8 and 9.

paired with smaller players like Johnny Beckman, Barney Sedran, Ray Kennedy, Marty Friedman, and Davy Banks, made excellent screening combinations. These smaller players compensated for their size with clever dribbling and ball-handling, speed and guile.

Nowadays there are small players who are quite adept at screening, but the play still is more effective with a tall operator at the helm. Perfect cooperation and timing are necessary to free the cutter. The taller players should be drilled to perfection on several or all of these

- 1. When to clear out.
- 2. How, when and where to feed cutters or other receivers.
- 3. How and when to bluff pass, feint or fake the guard out of posi-
- 4. To draw the opponent toward the wings or center and make a hole for the cutter.
- 5. To lure the guard into unnecessary switches, leaving the bucket free for a shot. (He should keep mixing plays with fake passes.)

6. When and how to dribble awav.

7. The ramifications of the 3second rule.

8. To fake to the weak side and

wheel around to the strong side, taking a shot with the free arm and protecting the ball laterally with the body.

9. To leap and turn, taking a shot in mid-air, or to step forward (away from basket), turn and flip the shot from high overhead, to avoid interception. (He should carry the ball overhead before the turn.)

The bucket should practice these plays with a stationary and moving pivot, learning to screen from the front, from the rear and laterally. If the boy is not mentally equipped to work these plays properly, the coach is wasting his time with the bucket play and should exploit the tall player's advantage in other ways. Following are a number of musts for all players, especially for the taller ones:

1. Proper timing in following up offensive shots and learning to take shots in mid-air. (Calls for con-

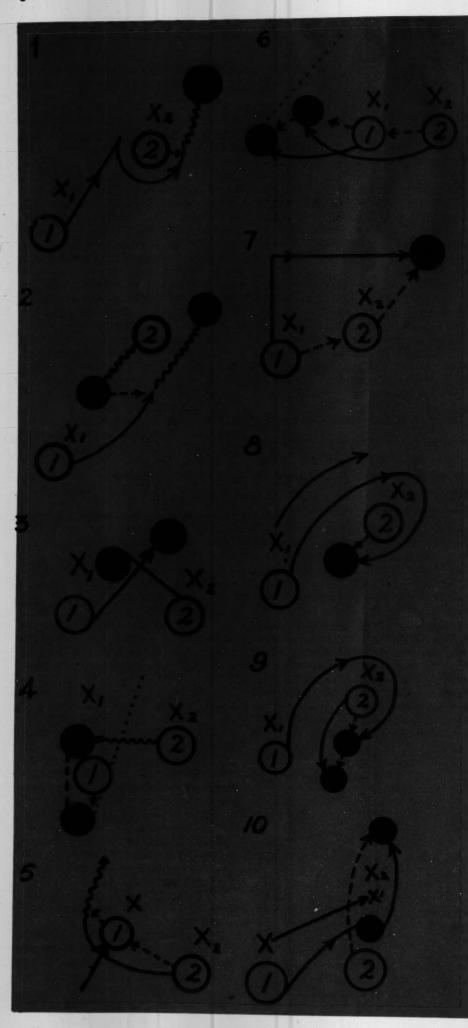
stant practice.)

- 2. Gaining control of the ball on its downward path by leaping high for the catch. He may then feed teammates or shoot. The closer to the basket the shot is taken, the closer to the basket will be the re-
- 3. Maneuvering into the most advantageous position for the defensive rebound. Getting the inside position, between guard and basket, and judgment in taking off at the proper split-second, come with experience and constant drilling.
- 4. Controlling the tap on jump
- 5. When others are involved in a toss-up, being close enough and on the alert to dash in from the restraining circle and use any reach advantage to gain possession.
- 6. Receiving spot passes on the run. Perfected through practice. Some of the passes should be aimed close enough to the basket to allow the man to leap in the air and shoot at the same time.
- 7. Switching to a taller opponent, especially under the defensive basket, concentrating on getting the ball and starting a fast break.

8. Taking the inside position (visitor's area) on foul shots by opponents.

9. Making a height advantage felt by cutting in front of the guard near the basket, receiving passes from teammates and feeding cutters

(Concluded on page 29)



Diag. 1 (Running Guard Into Bucket):
No. 1 passes to pivot-post 2, drives
straight in, and, with a sharp slice-off,
runs his man into the post. 2 flips a
return pass and 1 dribbles in for shot.
Options: 2 may fake pass and dribble
in himself on apposite side; or, instead
of going through with the slice-off, 1
may drop back for a set shot. The latter
is an especially good aption when X1
starts dropping behind the bucket man.

Diag. 2 (Rear Screen): No. 2 dribbles up to a spot three feet behind X1, stops and passes to 1, who dribbles in for shot.

Diag. 3 (Lateral Screen): No. 2 runs over and sets up a stationary screen on X1. 1 then cuts to his right and receives a pass from a teammate.

Diag. 4 (Forward Screen): No. 2 dribbles in between 1 and X1, stops and flips ball to 1, who has faded back. Since the two guards are trapped, 1 has a perfect set-shot.

Diag. 5: No. 2 waits for 1 to drive into the pivot-post position, then flips him a pass. 2 then slices around the receiver for a return pass. As a variation, 1 may fake the return pass, pivot and dribble in for a shot.

Diag. 6 (Successive Pivots): No. 2 passes to 1, cuts around him and comes to a sudden stop. 1 return passes and does the same thing. 1 flips him the ball and he takes a set. The successive pivots, when executed quickly and efficiently, will trap the guards whether they switch or not.

Diag. 7: No. 1 passes to 2 and cuts down and around toward the basket. The receiver pivots, holding the ball overhead. He delays his pass until 1 has made a sudden turn and gotten the edge on his man (one step ahead). 2 then tosses him a lead pass (two-hand overhead). 1 grabs it and lays it up on the run. As a variation 2 may take the overhead pass, to draw a switch from his guard, then quickly set and shoot.

Diag. 8: No. 1 cuts closely around 2, comes to a sudden stop behind the post, receives a short flip pass and shoots. The play will usually work effectively because X1 will aften delay his move up the floor, not knowing what his man is up to.

Diag. 9: If X1 chases 1 all the way, 2, after passing to 1, may drop behind the receiver and receive a back-bounce pass for a set shot.

Diag. 10: Here's a mousetrap that may be used whenever a guard gives his man too much room. 1 draws X1 between 2 and X2, stopping for a split-second to set up the play. He then breaks sharply off X2, for the pass from 2. X1 is run into teammate X2.

Diag. 11 (Out-of-Bounds End-Line Play): No. 1 passes to 2, who sets up with his back to the basket, cuts around and receives a return pass for a set shot.

Diag. 12: A follow up of 11. As before, 1 passes to 2 and cuts around for a return pass. This time, however, he fakes the shot and passes to 2, who whirls and cuts for the basket. X2 is thus run into teammate X1, much in the same manner as in Diag. 10.

Diag. 13: After practicing with twosomes, the coach may add another combination and use the same screens and variations. In this play, 2 may pass to either criss-crossing teammate or fake the pass, pivot and dribble or shoot. The play is also effective from an outof-bounds set-up under the basket, with the outside man feeding either 1 or 3, who cuts clasely around the pivot. 2 faces the basket, and may be fed the ball for a quick set if his man switches to a cutter.

*Diag. 14: May be used as an outof-bounds play or direct from floor. 2 and 3 cut to left, and 1 comes back for a set. If X1 follows him around, 1 may dribble around 3 and in for a layup. If X3 then switches to 1, the latter should quickly pass to 3, who should be free.

Diag. 15 (Out-of-Bounds Under Basket): 2 and 3 cut to left, while 1 breaks between space occupied by them for a pass from the outside man and a layup shot.

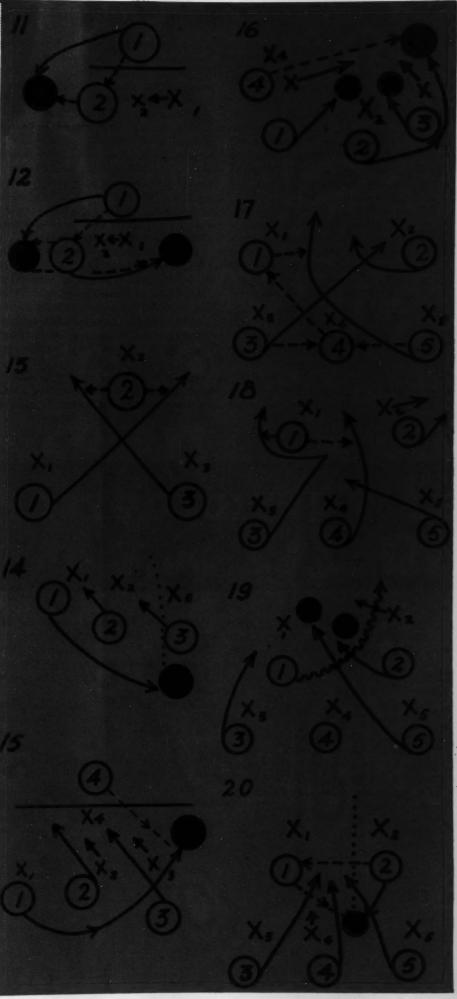
Diag. 16: Nos. 1 and 3 gang up on X2, double screening him. 2 circles right or left and receives a pass from 4.

Diag. 17 (Double Pivot Play): After moving the ball around with short, quick passes, or criss-crossing to each other's positions, either 3, 4 or 5 pass to either pivot. In this option, the ball is passed to 1. The man on 1's side, 3, immediately cuts diagonally across to screen X2. 5 cuts inside of 1, off 3's heels. 1 passes to 5 if he gets ahead of his man or to 2, if 5 is covered.

Diag. 18: No. 1 receives pass from 3, 4 or 5. No. 3 cuts across and quickly changes direction, running his man into 1. Meanwhile, 5 cuts over and sets up a screen on X4. 1 passes to 3 or 4. No. 2 takes his man away from the play.

Diag. 19: No. 1 receives pass from 3, 4 or 5. The latter and 2 cut across to screen X1, while 1 dribbles around for a shot.

Diag. 20: No. 2 passes to 1, then runs behind the triple screen set up by 3, 4 and 5, for a set shot. The three men break as soon as the pass is made by 2.



This is the fourth of a series of articles on physical fitness and the second of two installments on exercises for developing endurance and flexibility, by the distinguished physical educator and author, Dr. Thomas K. Cureton, who is associate professor of physical education at the University of Illinois.

N MOTOR fitness activity work two principal types of endurance are usually recognized: (1) Muscular, involving specific groups of muscles and (2) Organic, involving the cardio-respiratory organic mechanism.

In the first type, fatigue is usually due to exhaustion of the motor neuro-muscular mechanisms, beginning perhaps with a breakdown in the functioning of the muscle fibers because of accumulating lactic acid or fatigue of the motor end plates in the muscles. Dr. Burge, of the University of Illinois, has shown that long, continued exhausting exercises engender some fatigue in the motor brain nerve currents. It is possible to assume, therefore, that the cells in the motor brain may become more powerful with continuous endurance training.

No. 4: Exercises for Endurance and Flexibility

ter a preliminary training period when skill is fairly constant.

Such prediction studies show the great importance of good blood, a strong heart and diaphragm, and good vascular tone in endurance performances. A well-conditioned runner or swimmer usually has a slower pulse rate lying and standing, a relatively higher diastolic blood pressure, a relatively quick recovery pulse after a standard stepping-up exercise, good breathholding capacity after exercises and strong abdominal muscles.

Most exercises are relatively poor for stamina building. Observation of any typical physical education class indoors or outdoors will show only a trifling amount of endurance activity. There is very little endurance running, endurance swimming, pace hiking, or "all-out" endurance test exercises.

In most team and group games or dances a great deal of time is spent in formations, organizing, talking, resting for the next play or the involve a relatively complete warm-up, then "all-out" effort to carry the peak-load considerably beyond the steady physiological state. Exercises may be thought of as general or specific to some part of the body.

General Endurance Exercises (Running and Swimming):

- 1. Jogging.
- 2. Pick-Up Running.
- 3. 300-Yd. Shuttle Run (Army).
- 4. 100-Yd. Run and Drop-Off Index over 1000 Yds.
 - 5. Mile Run.
- 6. 440 Piggy-Back Carry for Time.
 - 7. 2-Mile Run.
 - 8. 3-Mile Run.
- 9. Pace Hiking (Army Stand-
- 10. 11/2-Mile Cross-Country Run.
- 11. 31/2-Mile Wartime Steeplechase Run.
 - 12. 880-Yd. Obstacle Course,
- 13. 100-Yd. Swimming Endurance Test and Drop-Off Index.
 - 14. 440-Yd. Swim for Time.

THE PHYSIOLOGY OF FITNESS

By Dr. Thomas K. Cureton

In organic endurance the heart muscle and tone of the aortic arch and sphlanchnic arterioles and veins are factors. It is possible to predict 440 yards endurance swimming time from cardiovascular and respiratory tests (Larson's formula).15

Recent studies at the University of Illinois16 have shown that the Schneider (cardiovascular) test is good for predicting endurance running performances, provided the men try their hardest and the fat or exceedingly thin and under-developed muscular types are eliminated. The predictions are best af-

next turn. Catching eight or ten balls in the field isn't building endurance for the shoulders, feet, back or abdomen. Carrying a buddy 440 yards piggy-back does much more good.

In an "all-out" hopping test done (1) 200 up and down (2) 200 straddle jumping (3) 200 stride jumping (4) 100 on the toes of each foot and (5) alternate full kneebend jumps to exhaustion, the softness of the feet and legs is brought out. Fewer than half of the boys in high school or college can do more than 700 of such hops and practically none can do 800. In about four minutes the feet, calves and thighs are all done, aching with pain or cramping up sufficient-

Organic development exercises17

ly to stop the performance.

17These are conditioning exercises which have been standardized at the University of Illinois in the Physical Fitness courses. More adequate descriptions will be found in the Physical Fitness Workbook (2nd edition, revised). Champaign, Illinois: Stipes Publishing Co., 1943.

15. Pop-Up Swimming for Distance, Breath Every 25 ft.

16. Underwater Swim for Distance.

17. Tread Water for Time, Legs Alone, Whole Head and Hands Out.

18. Running in Place 2-5 minutes and Holding Breath.

19. Pentathlon, Hexathlon or Decathlon Events.

20. Continuous Workouts for One or More Hours.

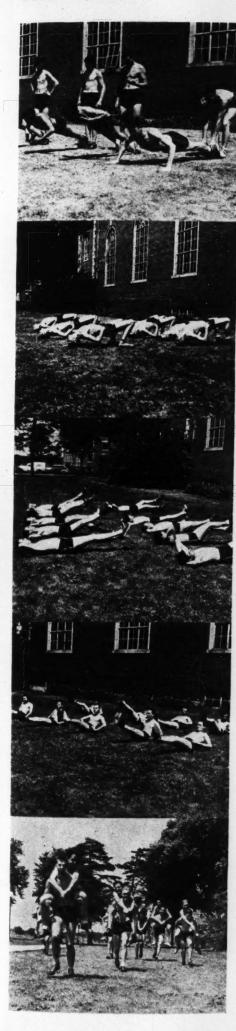
Endurance Exercises for Specific Parts of Body:

- (A) Feet and Legs:
- 1. Walking Barefoot.
- 2. Walking with Supinated Feet.
- 3. Hopping Continuously (Alternating 6 Styles).
- 4. Jack Springing Continuously.
- 5. Vertical Jumping and Reaching, Continuously.
- 6. Breast Stroke Continuous Exercise.
- 7. Full Knee Bend Exercise with Jumping Jack.

¹⁶J. H. McCurdy and L. A. Larson, "The Validity of Circulatory-Respiratory Mea-sures as an Index of Endurance Condition in Swimming," Research Quarterly, 11: 3-11 (Oct., 1940).

¹⁶T. K. Cureton, "The Schneider Test as an Instrument for Rating Physical Fitness" (mimeographed and unpublished study), School of Physical Education, University of Illinois, 1943.

Ibid., "Prediction of Endurance Running from the Cardiovascular Variables and a Short Form of the Schneider Test," 1943.



(B) Hands, Arms, Shoulders and Upper Trunk:

1. Hanging and Swinging on Rope or Pole.

2. Rope Climbing (or small trees).

3. Rope and Pole Vaulting for Distance.

4. Chinning the Bar.

5. Dips on Parallel Bars.

6. Floor Push-Ups.

7. Forearm Body Lifts.

8. Squat Stand for Time.

9. Push-Ups with Chest Slaps.

10. Medicine Ball Throwing, Overhead.

11. Medicine Ball Put for Distance.

12. Pulley Weight Exercising, Facing and Backward.

(C) Front Trunk (Abdominal and Thigh Flexor Muscles):

1. V-Sit.

2. 1/2-Sit.

3. Sitting Leg Tucks.

4. Sitting Leg Kicks.

5. Flutter Kicks on Back.

6. Leg-Lifts on Back.

 7. Sit-Ups, Feet Free.
 8. Elbow Touch Sit-Ups, Feet Held.

9. Alternate Leg Kicks, Upward for Height.

10. Alternate Leg Kicks, Knee to Shoulder, Back Support Position.

(D) Back Trunk and Neck:

1. Chest Raisings, Lying with Hands on Neck, Partner Holding Feet.

2. Backward Stick Body Test.

3. Head and Neck Bridge for Time.

4. Backward Leg Raisings.

5. All-Types of Running and Jumping.

6. Leg Raisings, Lying on Front, Partner Holding Feet.

7. Trunk Bending Forward, with Fast Upward Lifting and Arm Flinging.

(E) Lateral Trunk Muscles:

1. Side Leg Raisings, Lying on Sides, Alternately.

2. Side Leg Raisings, From Side Leaning Rest Position.

3. Sideward Sit-Ups, Partner Holding Feet.

4. Elbow Touch and Cross-Over (Continued on page 31)

Left: Endurance Type Exercises, from top to bottom: Push-Ups with Chest Slaps (as many times as possible); Neck Bridge for Time; Flutter Kick on Back (as many as possible); V-sit for Time; and Piggy-Back Carry.

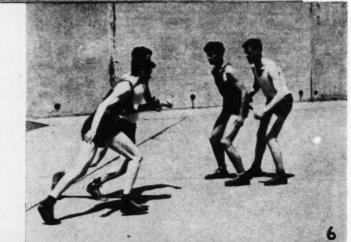
Right: Endurance Hops, from top to bottom: Up and Down (200 times); Straddle (200); Alternate Stride (200); Right Toe (100); Left Toe (100); and Alternate Knee Bends (as many as possible).











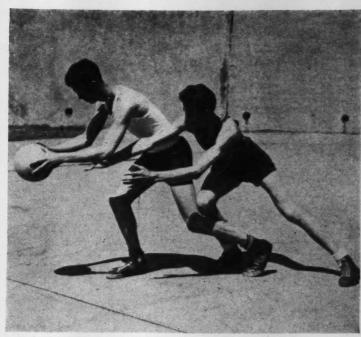




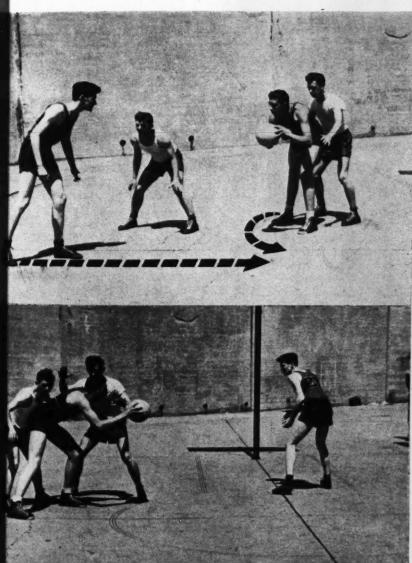
CALL 'EM AS YOU SEE 'EM

ALTHOUGH the rules makers supposedly mopped up the screen-block controversy some years ago, all is not yet quiet on the intersectional front. The block rule is still getting an individualistic interpretation. Yet the code is clear enough. A screener must give 3 feet clearance, and he must remain stationary. An excellent visual presentation of the rule appears in Dave Tobey's new book, Basketball Officiating, and is shown on the opposite page. As may be seen, the screener takes a position at least three feet from the opponent (No. 3), and stands perfectly still while the opponent is being run into him (No. 7). Had he taken any closer position, or moved in the 5th, 6th or 7th pictures, the responsibility for the contact would have been on him.

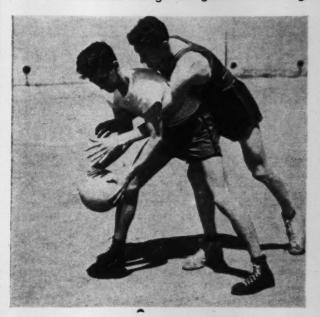
Right: Kneeing the pivot, foul on guard; a difficult play to see when guard is feigning an honest attempt at the ball.



Below: Foul on bucket man for pinching guard's arms with upper arms to make it look as though the guard is holding.



Above: A common illegal screen, pivot waits for teammate to cut by, then turns to cut off pursuing guard. To make play legal, ball-handler must pivot in time to permit guard to avoid him.



Below: Another common foul by pivots—backing up. Ball-handler steps back or thrusts hip at guard to keep him away.





STRAIGHT FROM THE SHOULDER

By Frank O'Brien

Frank O'Brien serves as adviser to the Rifle Club at Springfield, Mass., Trade School.

ESPITE all the educational literature to the contrary, there are people who still maintain rifle shooting is dangerous for high school students and that it should not be taught in the schools.

At best, this is a specious argument. Shooting is dangerous when it is not taught. Boys who have access to rifles will always shoot them. If they are discouraged, they will shoot on the sly. That's when it becomes dangerous.

And that's why it pays to teach them. As long as they're going to shoot anyway, they may as well be taught the proper method and safety precautions. Rarely will you find a "taught" shooter involved in one of those I-didn't-know-the-gunwas-loaded accidents. They know when a gun is loaded, and respect it accordingly.

In any light, when taught in an educational environment under proper supervision, shooting can be a source of considerable fun and physical benefit.

The most satisfactory teaching medium is an after-school club. At

least, that has been the author's experience. At Springfield our first step was to become affiliated with the National Rifle Association. This immediately opened an avenue of much material aid.

Range: Our first practical problem was building a range. We were fortunate in having a very large bicycle and storage room in a subbasement. We measured off the space required for a 50-foot, sixposition range (65 x 25 ft), built new compact racks for the bicycles and moved and rearranged various storage.

Backstop: We use steel plates 6 ft. x 2 ft. x % in., slanted about 60 degrees to deflect bullets downward. A foot of sand at the bottom of the steel plates catches the ricochets.

At the extreme ends of the backstop are wooden flash boards which extend toward the firing line and into which lead spatters penetrate and stop. These boards are replaced from time to time. We have hung sandbags against the backs of the steel plates to deaden the sound of contact and to stop vibration. This we consider an ideal, permanent backstop.

Wartime Substitute Backstop: If

Left: This fine range was built entirely by the Trade School students at Springfield. All painted surfaces at the targets are dull gray or black, while the rest of the range is flat white. The overhead lights are shielded from the firing line. Gym mats with white canvas covers make comfortable shooting positions.

steel plates are unavailable, a very suitable backstop may be built of wood and sand. The materials needed are 2 x 3 joists and matched 5% in. boards. The length of the backstop will be determined by the number of firing points. It is ideal to have four or five feet for each firing position, but a little less is permissible.

The backstop should be six feet high and not less than two feet thick. This height allows for shooting in the standing position. The targets should be about 16 inches from the floor for the prone, kneeling and sitting positions and four to five feet for off-hand shooting.

In constructing this type of backstop, first build a well-braced frame of the length desired. Be careful that the front framework is not in line with the targets. If it is, your frame will be shot away. And frames are hard to replace once you've nailed on the outside boards and filled the box-like structure with sand.

When the frame is ready, nail on the back and end boards. Then nail on the front boards by starting at the bottom and building up. Fill with sand as you build. This is easier than dumping all the sand over the top of a six-foot structure.

When nailing the front boards, use finishing nails and nail through the edges to the joists so that no (Continued on page 22)



To obviate the tendency of its steel backstop to ring and vibrate, Springfield has cleverly soundproofed it by suspending sandbags against the backs of slanted plates. The semaphore in the center of the picture flashes a green disk above the target when all range doors are shut, and a red disk if doors are open.



LOOKIT, GANG, A BASEBALL OUTFIT — NOW ALL WE GOTTA DO IS CLEAR OURSELVES A DIAMOND AND WE'LL SHOW THOSE MARINES HOW THE NATIONAL GAME IS PLAYED!

In the jungles of the Far East — on the desert sands of Africa — in the barren wastes of Iceland our boys in the Armed Forces are still sports minded.

Athletic Equipment is a necessity — a means for providing relaxation — a change of pace from the tension and hardships of their daily tasks.

If Athletic Equipment is not available to you, remember — it is doing a double duty on the home front — the high seas and every far flung out-post of the world.



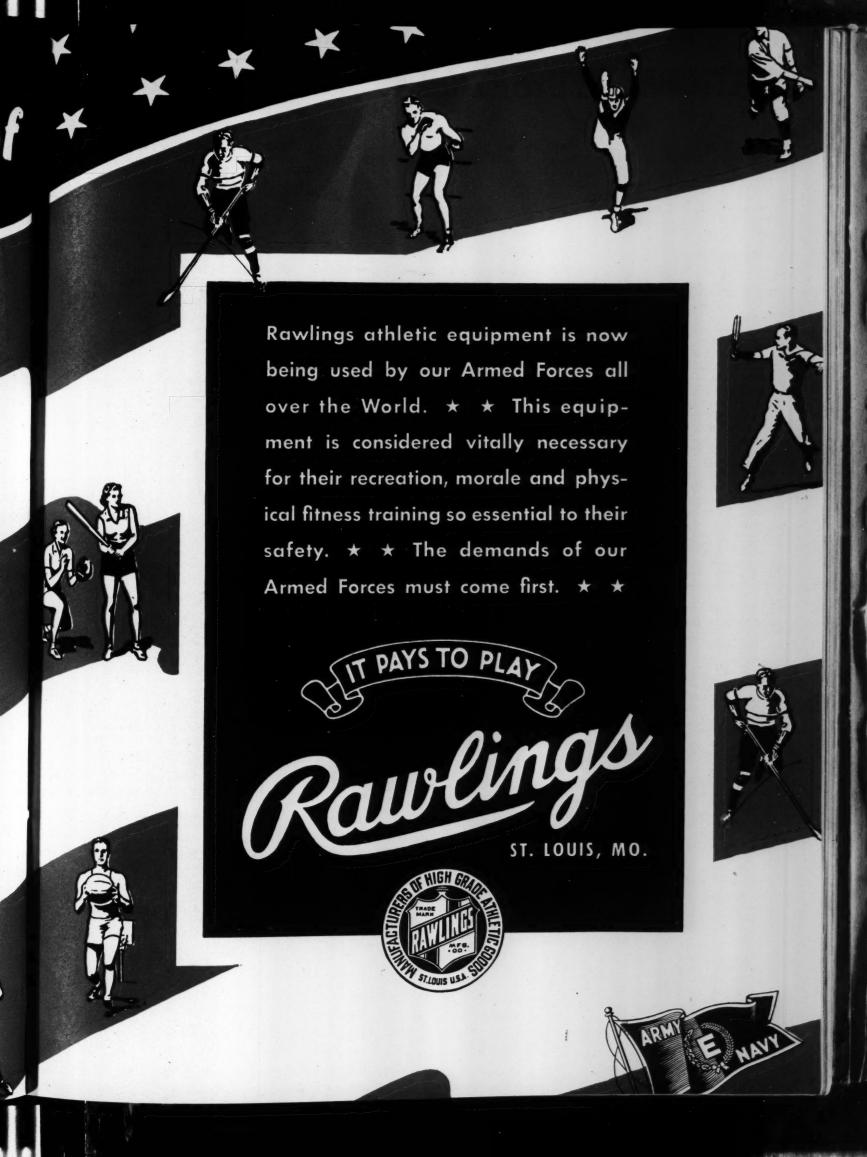








WORLD WIDE ACCEPTANCE proves the EXTRA VALUE of ATHLETIC



NATIONAL FEDERATION NEWS

Edited by H. V. Porter

SCHOOLS are confronted with many problems connected with the 20 percent withholding tax. The current tax payment act requires an employer to deduct and withhold 20 percent of all wages above the employee's personal exemption. The question is: Are the wages of ticket sellers, contest judges, athletic officials and similar employees taxable?

A flat statement will not cover every case. The determining factor is the relationship of employer and employee—whether the person for whom the service is performed has the right to control and direct the individual

who performs the service.

Generally speaking, this employeremployee relationship does exist in connection with such employees. Insofar as athletic officials are concerned, it has been claimed that such officials operate as "independent contractors" who contract to administer the game in accordance with the code made up by the national committee in each of the sports. Such a man can not be controlled, directed or dismissed by the individual employing him while he is performing these services. To this extent, he is an "independent contractor" rather than an employee.

However, not every tax collecting agency will accept these conditions, and a school must recognize the fact that if it does not withhold the 20% tax, it may be liable for this amount at the end of the tax period (each 3 months). Some schools are taking no chances in the matter and are withholding the tax and reporting periodically to the local Collector of Internal

Revenue.

Unless the employee supplies the employer with Form W4 of the Internal Revenue Department to indicate the employee's withholding exemption, the employer must withhold 20% of the entire amount paid for the service and he must turn this amount over to the Collector of Internal Revenue. Failure to make such a report on time results in an appreciable increase in the amount which must ultimately be paid.

From the states

California: Word from David P. Snyder of Oakland, one of the pioneers in the Federation Football Rules movement, indicates considerable interest in that territory in the possibilities of the high school contacts with the National Physical Fitness Committee. Snyder is president of the California Association for Health, Physical Education and Recreation, and is also active in the work of the California High School Athletic Federation.

Oregon: Friends of Troy Walker will be interested in knowing that he

is now stationed at Salem, in charge of Selective Service activities for the state.

Kentucky: Vice - President W. B. Owen, who edits the Kentucky High School Athlete, has moved from Horse Cave to Leitchfield. The Kentucky association divides association duties among the officers. The president primarily is responsible for eligibility problems, the vice-president edits the Athlete and the secretary is responsible for finances and service contacts between the member schools and the association.

National fitness progam

National Physical Fitness Committee Work: The National Physical Fitness Committee which operates under the Federal Security Agency of the federal government is working continuously to aid in the directing of greater attention to the need for an extensive physical fitness program. The contacts of the high school with this national group is through the Sub-Committee on Schools and Colleges under chairmanship of Col. T. P. Bank. The high schools are being called upon to step up their efforts to extend the sports and class programs to every student in school.

To render assistance in efforts of this kind, the Committee is drafting a nationwide program in which every school will be asked to participate. The program is designed to place the prestige of the federal government behind the high school program and to provide machinery whereby the schools may reap the benefits of ideas assembled from every part of the na-

North Carolina: According to President C. R. Joyner of the High School Athletic Association, the state will soon vote on the proposal to become a member of the National Federation. If North Carolina joins up, it will become the 42nd Federation member. The membership includes Delaware and Maryland whose schools cooperate in Federation activities although there is no state association machinery whereby actual membership may be secured.

Federation membership is also being contemplated by New Hampshire, Rhode Island and Massachusetts.

Montana: During the past few months, an outstanding piece of work has been done by Secretary Wollin and his board of control. Despite the fact that distances between member schools are great and gasoline supplies are low, they have been urging maintenance of a full program of sports. The state association office is trying harder than ever to plug the need for intramural and other physical fitness activities.

There doesn't seem to be any decoration for this type of "service above the requirements of duty." If there were, it would go to the men in this part of the country.

Connecticut: As usual the Interscholastic Conference is exhibiting typical Yankee ingenuity and persistence in keeping its program running. Despite the fact that travel difficulties and related handicaps ruined tournament attendance in that state last year and put the association financially in the red, the Conference continues to function efficiently.

Connecticut is the smallest of the National Federation member states and funds for the maintenance of the state association are small. Nevertheless, this state is the only one east of Ohio which prints a regular monthly magazine and it is one of the few Atlantic Coast states where machinery in activities such as the sanctioning of tournaments and meets, the supervision of athletic officials, an athletic accident benefit plan and statewide committees in sports such as basketball and track actually function. The Connecticut Conference magazine is a model in neatness, good editing and valuable content.

Our hats are off to Secretary Walter Spencer and his co-workers on the

board of control!

Intensify fitness work

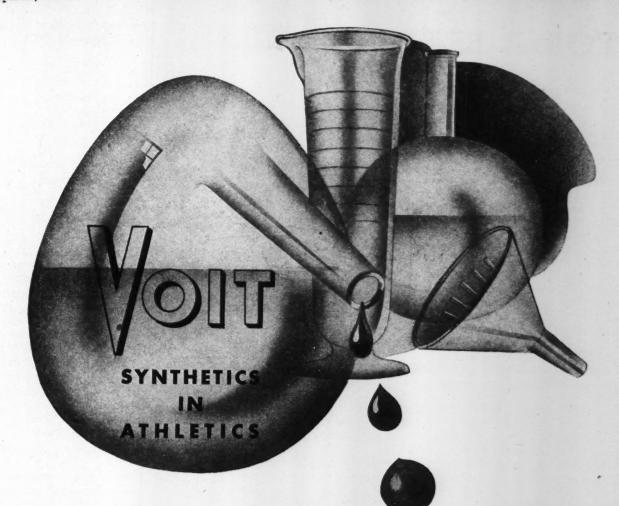
Mississippi: At the recent annual meeting of the High School Literary and Athletic Association, the group expressed a determination to stress further the various athletic and physical fitness activities and to perfect the statewide machinery through which the work can be more effectively done. President Sale Lilly and Secretary W. B. Kenna have been active in directing attention to the possibilities along these lines. They are ably supported by such men as Principal Gilmer McLaurin, Chairman of the Principals' Association. The meeting at Jackson was well attended despite difficulties of travel.

Ohio: The athletic coach at Galion is being sued for \$25,000 for keeping a boy who refused to come out for spring practice off the football team. The complainant also charges that the coach made slanderous statements

about the boy.

In the line of regular business, the state association has announced the sponsorship of a full basketball tournament program. Their action parallels that of most of the other central states.

New Brunswick, Canada: The province of New Brunswick recently became an affiliated member of the National Federation, and is now getting out a monthly mimeographed bulletin.



WATCH FOR AN IMPORTANT ANNOUNCEMENT NEXT MONTH REGARDING VOIT'S BETTER-THAN-EVER SYNTHETIC-RUBBER-COVERED ATHLETIC BALLS!

These new, improved footballs, basketballs, volley balls, soccer balls, and soft balls play better, last longer, resist wear on rough playing surfaces, stay inflated longer...thanks to synthetics, plastics, and Voit war-born "know-how".

SAVE A LIFE-GIVE YOUR BLOOD TO THE RED CROSS



SYNTHETIC-RUBBER-COVERED ATHLETIC EQUIPMENT

Mfg. by W. J. Voit Rubber Corp., 1600 E. 25th St., Los Angeles 11, Calif.

FOR A BETTER PRESS

By Worthern C. Cornish

Worthern C. Cornish, sports editor of the Portland, Me., "Press Herald," has contributed to "Esquire," "Sporting Goods Dealer," "Golfdom," and "Sport Story," among other magazines.

F YOU could sell ten hot dogs and ten cups of coffee for several hundred dollars, you'd leap at the chance, wouldn't you?

Then why not invest in improved press relations? A good press pays dividends in publicity, and that's what helps draw the public to your games.

Feeding the sportswriters hot dogs is just one way of cementing good relations. You must win their friendship, cooperate with them and see that they view the game in comfort. Always remember that the box office is built in the newspapers and that you're a friendly press agent, representing and selling amateur sport.

Being human, sportswriters are more prone to write an extra paragraph or run an extra picture about a school whose press relations are conducted with intelligence, than about a school which, perhaps unintentionally, lends the impression that it is doling out favors.

The major colleges discovered long ago that it's publicity that makes the world go round. To draw the name writers to their games, they built comfortable press boxes and provided snacks between halves.

The high schools have been slow to pick up the cue. Of course it is impossible for most schools to provide lavish accommodations and nourishment for the press. But they can improve upon their present methods of accommodating them.

Even now many a high school pays no attention to the sports writers other than to let them wander up and down the sidelines, bobbing constantly to avoid blocking views and ruining the knees of their best herringbones through constant contact with terra firma—for most of their notes must be taken in a kneeling position.

These schools often wonder why Lennie Payne, covering another game in the vicinity, waxes warmer in his story than the knee-less herringboner. It might be that Lennie, in a covered press-box, warmed by a half-time hot drink, has more legible notes and more enthusiasm when he hunches over his type-writer.

I once heard a high school princi-

pal argue that he had sent a paper two tickets for a game and since a writer and a photographer were covering, he didn't see why he should admit the writer's young son free of charge. The writer in question had run several expensive cuts during the week, written a column about the game and given the school a layout the morning of the contest.

A week later, the school's coach asked him why another game seemed to be getting the weekly "buildup." "I have no favorites," said the writer, relating the principal episode. "But I don't relish giving away hundreds of dollars worth of publicity and then being considered a chiseler because I want to get a nine-year-old kid into the game."

The coach knew his way around. "Pay no attention to that guy," he advised. "When you want tickets, call me. Or better, yet, I'll send you a dozen for every game."

Coaches, as a rule, are closer to the sportswriters than athletic directors, although in many schools the coach and the athletic director are one. For best results, in handling publicity, the two school men should work as a team. Teamwork pays dividends in extra shares of publicity.

Reporter's job

The small city reporter has a job to do. He wants the lineup as early as possible so that he won't be scribbling it down at the last minute or after three successive plays have gone for long gains. He must take notes on those plays if the team—and the coach—want an accurate writeup the next day.

The same applies to substitutions. The coach who does not distribute substitutes' numbers—then sends in a flock of reserves, is laying himself open to adverse publicity.

Summing up, then, here are the ways to improve your press relations:

1. If you provide a press-box, see that it's a good one. Best of all, let a sportswriters' committee handle it. Then you won't be bothered by complaints when the third cousin of the chairman of the school board refuses to budge from a working-press seat.

2. If at all possible, see that the writers have a covered press-box.

(Taking notes in a rainstorm, running up and down a sideline, is no fun.) For basketball, provide a smooth table and a seat.

- 3. See that lineups are available as quickly as possible and that the substitutes' numbers are also included—preferably on slips of paper—as the subsenter the game.
- 4. See that the press gets all the tickets they want—within reason. A writer's Aunt Marion may want to see the game; if she must pay, or if he must pay for her, he may be in an indignant mood when he attacks his typewriter.
- 5. After a writer has said many nice things about your team, do not jump on him when, sticking to facts, he writes that your boys looked ragged last week. Remember the good things he wrote and keep quiet. Thank him for the good writeups, praise his column—and he'll meet you more than halfway.
- 6. If you have any tips—a sudden injury, a player out of the line-up or back in, a boy leaving for the Marines—call the writer up. That's his living, getting stories.
- 7. Don't forget the hot-dogs and coffee.

An interesting commentary on school-press relations appeared in the August Kentucky High School Athlete. Fred Hughes, editor of The Leitchfield Gazette, wrote:

The daily newspaper and such national sports as baseball and football are in a way dependent upon each other for their very existence, that is, to the extent of being profitable. . . .

The small-town newspaper is not going to spend a lot of money and time in reporting news of high school sports, because they haven't too much of either. But it would be of mutual advantage if the high school coaches or principals saw to it that their school athletic contests are given a little more publicity. . .

Probably because we have such a diversified line of news sources to watch, it has always seemed that it would be comparatively simple for the coach to designate a student or member of the team to see to it that a lineup, with individual scores, is turned in after each game to the local newspaper. It does not have to be accompanied by a writeup. There is no reason why the newspaperman can't take the information submitted, and write an unbiased story to go with the lineup. And, after all, the lineup in itself is a story that needs very little added to it.

We have tried every way we know of to get this done by six high schools in our county and have had practically no success at it even after pleading with the coaches personally and saying a word to the principals and superintendents. We have supplied printed forms and postage paid envelopes, but our efforts were wasted.

(Concluded on page 32)



New teaching aid scores hit!

First Coach .. "These Air Age Picture Charts are almost a complete aviation course in themselves!"

Second Coach . . . "Yes-they're a big help! The students are enthusiastic about them. And this book is excellent!"

THERE'S nothing else like it in print. American Airlines' unique set of Air Age Picture Charts and Book will help you prepare Junior and Senior High School boys and girls for a successful career in air transportation. That's why so many coaches

already have ordered the set for themselves and their students.

This easy, fascinating way to learn about aviation is amazingly low in price. One glance at its contents is enough to see that it's worth a great deal more than the \$1.00 for which it's offered. It contains 6 big, 3-color picture charts, each devoted to a different phase of aviation-The Air Ocean, Meteorology, Airplane and Aerodynamics (The Airplane and How It Flies), Airline Operation, Air Communications and Air Navigation -plus an authoritative 64-page book which vividly explains and illustrates these vital subjects.

The supply of this Air Age set is limited. So today, order for yourself and your students. Use the coupon below.

sets* of AIR AGE

(money order or cash-NO STAMPS,

Fill in and mail Today

ROUTE OF THE FLAGSHIPS

Enclosed is \$_____(money order or concentrations). Kindly forward_PICTURE CHARTS AND BOOK TO:

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American Airlines, Inc., Dept. C-2 100 East 42nd Street New York 17, N. Y.

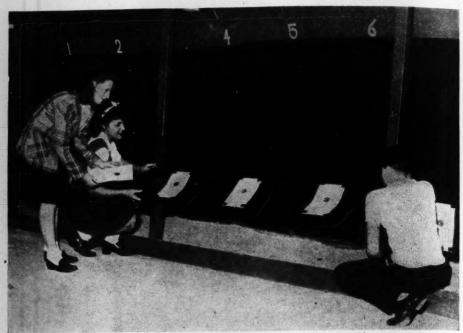
*Charts may be purchased for 25¢ each, plus 10¢ for postage and handling; Book for 75¢, plus 5¢ for postage and handling.



ordinary mats have tufts "waxed" with paraffin. Paraffin dries, peels... the tufts unravel, loosen ... it's the beginning of the end of your mat. ATLAS-ATHLETIC triple-knotted mat tufts are heavily waxed with genuine BEESWAX to insure the long and useful life of the mat. Genuine beeswax will not melt in warm weather nor crack in cold. It cleaves, adheres and sticks for years, holding each and every tuft firm, fast and fixed. Remember, no mat lasts longer than its tufts.



ATLAS-ATHLETIC EQUIPMENT COMPANY 4439 Manchester Avenue ST. LOUIS 10, MISSOURI



Putting Up New Targets: Target racks are detachable from backstop frame. While one group is shooting another group, at a safe distance behind firing line, prepare targets for their turn. No metal is used in front of the backstop. All braces, even the small clamps that hold the targets to the racks, are constructed of wood.

Straight from the Shoulder

(Continued from page 14)

nail-heads show. This will leave no nail-heads for ricochets. Be sure the backstop is in position before filling it with sand; otherwise it will be too heavy to move when completed.

The only fault with this wooden construction is that the wood directly behind the target is shot away in time and must be replaced.

Firing Line: Next to the backstop, the firing line is the most important part of the range. Make no compromise with safety. Place your firing line at a specific point, where it can always be distinctly identified. Our range is an N.R.A. specified 50-foot range; our line, hence, is 50 feet from the target line.

Our floor is of concrete. Painted on it is a two-inch thick white line, which designates the firing line. Behind this line and running the full length of it, are regular gym mats upon which the shooters take their positions. Each firing point is numbered in front by a four-inch stenciled figure, which is in line with the corresponding figure on the backstop.

Also stenciled on the floor in front of the firing line is a warning: "Leave the Breech Open." Even though the shooters receive this and much other instruction, it is a good safety precaution. They understand that the only time the

breech is closed is when the rifle is loaded and aimed at the target. We have fired over 200,000 rounds of ammunition on our range without an accidental discharge.

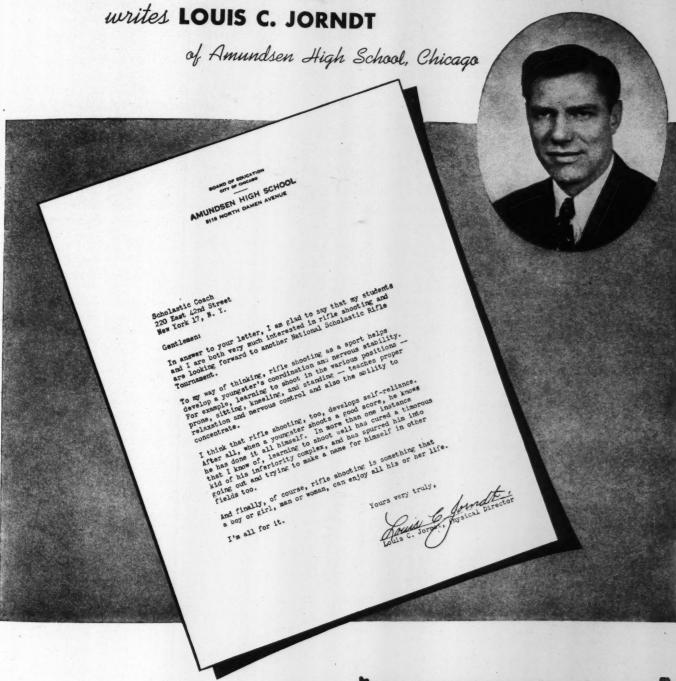
Rifles: Good rifles for school use may be purchased for about \$20. They should be bolt action. Practically all the bolt-action rifles in this price range can be single, five, or more round clip loaded. For good shooting, click adjustable peep sights and regulation slings are necessary. These are included on many makes within the \$20-\$30 price range.

Our club has eight rifles and is about to buy four more. Club members may use their own rifles provided they have been examined by a competent instructor and declared to be in A-1 condition. We discourage the use of tubular magazine rifles and those that are not accurate or that have sights not suitable for target use. Rifles may be secured by affiliated clubs by contacting the National Rifle Association (see coupon on page 32.)

Ammunition: We buy our ammunition in case lots through the N. R. A. and resell it to club members. At the end of every shooting session, the members hand all ammunition not used to the instructor in charge. This ammunition is locked up and issued to the owner

(Concluded on page 24)

"Rifle shooting develops self-reliance"



Remington will help you plan the organization of a rifle club and the building of a range. As a starter, we will be glad to send you, free, an interesting, fully illustrated booklet containing instructions on the operation of a rifle club—including information on equipment, marksmanship, target shooting, practical shooting and the construction of rifle ranges. Just fill in the coupon and mail it to Rifle Promotion Section, Remington Arms Company, Inc., Bridgeport 2, Conn.



Rifle Promotion Section	S. C. 12-43
Remington Arms Company, Inc.	
Bridgeport 2, Conn.	
Please send me, free, your Instructor's M	fanual on the operation of a rifle club.
Name	School
Address	City & State



American fighting men in camps with Porter physical fitness apparatus. . . . True, almost all our production today is for the U. S. armed forces. But, come V-Day, our factory will again provide America's schools, clubs, parks and playgrounds with America's finest physical fitness equipment. . . . However, WPB has approved release of some items of gymnasium equipment to schools with physical education programs approved by the U. S. Office of Education—in order that American children today may be made strong for tomorrow. List on request.



Makers of the famous "Spalding," "Chicago" and "Louden" lines of Gymnasium, Playground and Swimming Pool Equipment.

(Continued from page 22) when he next comes to the range.

We make a small profit on the sale of ammunition. More important, however, is that we control the kind of ammunition being used on the range. It is always the same and, after firing thousands of rounds, we are convinced it is the best. We use long rifle .22's exclusively.

Lighting: Our lights are all overhead and are shielded against glare. We use a 150-watt reflector bulb for every target. At the firing line we use a soft, shielded light that eliminates reflections and glare on the sights.

Targets: After trying several different types, we have found that official N.R.A. targets far surpass any we can make or secure elsewhere. The paper must break out and leave a clean bullet hole for efficient scoring. N.R.A. lithographed targets are made with a dull black ink that does not glare or reflect light. This makes for easier sighting and hence, better scores.

Range Conduct: We strive for discipline without severity. To shoot best young people must be in a friendly atmosphere and they must feel relaxed. Those not shooting are taught not to talk or move about behind the firing line while others are firing. After a group has shot, pent up energy is always quickly expended in a discussion on the results. The waiting group then puts up its targets and has its turn.

Loading blocks

All beginners load rifles for single shot firing. We have loading blocks at each firing point. These are blocks of wood with five one-fourth inch holes bored in them. When a group is ready to shoot, each person places five rounds of ammunition in his block. When the block is empty he has shot his target. No one in a group loads his rifle until the "commence firing" order is given and no one leaves his position on the firing line until the "cease firing" order.

Rewards: We have matches of our own as well as those conducted by the N.R.A. and Scholastic. Our team competes in the Annual Hearst Match. We put up small prizes such as shooting magazines, club emblems, and ammunition. Once a year we have a gold cup club championship match. Even a very small prize, a magazine or club emblem, creates a lot of interest and scores improve all along the line.

Dues and Finance: Our club dues are \$1. from the time a member joins until June. The school has a student fund into which all student activity

money is paid. This fund, in turn, is used as capital with which to conduct all student activities. Just before Christmas we conduct a neck-tie sale which nets a profit. A club dance is now in the offing. As long as we put into the student fund as much money as we ask for, there is no complaint from the treasurer.

Club Emblems: We have a club emblem which is made on felt by silk screen process in our own school. When a student joins the club he is given his emblem, membership card, and two excellent booklets on riflery furnished by the N.R.A.

Instructors and Instructions: The author's shooting background of more than 30 years has helped considerably in the conduct of the club. But experience is not a necessity. We have a woman gym instructor who never shot a rifle until a year ago. In one year she has become an excellent shot and is now an outstanding coach with both boys and girls.

N.R.A. course

At least one instructor in every club should be an N.R.A. commissioned instructor. Whether he has had many years of experience or is a new comer, his knowledge will be greatly enriched by qualifying for an N.R.A. commission.

There is no expense connected with the qualification. It consists of a correspondence course from books furnished by the Association and the shooting of some targets with specified scores. Even after thirty years of shooting the author thoroughly enjoyed this course and gained a lot from it. (This course may be obtained by checking the coupon on page 32.)

Before new members shoot they are tested as to sighting ability and as much time as is necessary is spent on teaching them to sight properly. A short group lesson about some part of the rifle is given at every club meeting.

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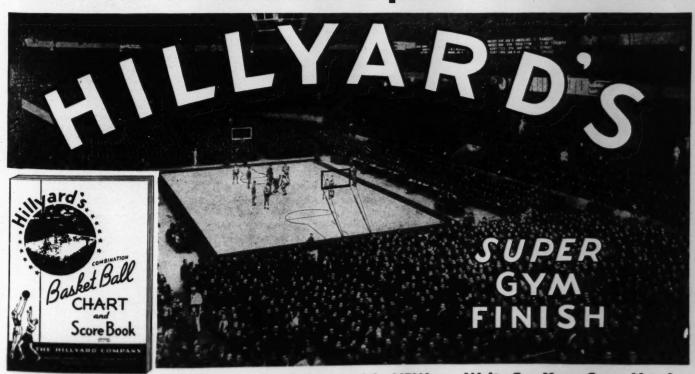
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Makers of the famous "Spalding," "Chicago" and "Louden" lines of Gymnasium, Playground and Swimming Pool Equipment. (Continued from page 22) when he next comes to the range.

We make a small profit on the sale of ammunition. More important, however, is that we control the kind of ammunition being used on the range. It is always the same and, after firing thousands of rounds, we are convinced it is the best. We use long rifle .22's exclusively.

Lighting: Our lights are all overhead and are shielded against glare. We use a 150-watt reflector bulb for every target. At the firing line we use a soft, shielded light that eliminates reflections and glare on the sights.

Targets: After trying several different types, we have found that official N.R.A. targets far surpass any we can make or secure elsewhere. The paper must break out and leave a clean bullet hole for efficient scoring. N.R.A. lithographed targets are made with a dull black ink that does not glare or reflect light. This makes for easier sighting and hence, better scores.

Range Conduct: We strive for discipline without severity. To shoot best young people must be in a friendly atmosphere and they must feel relaxed. Those not shooting are taught not to talk or move about behind the firing line while others are firing. After a group has shot, pent up energy is always quickly expended in a discussion on the results. The waiting group then puts up its targets and has its turn.

Loading blocks

All beginners load rifles for single shot firing. We have loading blocks at each firing point. These are blocks of wood with five one-fourth inch holes bored in them. When a group is ready to shoot, each person places five rounds of ammunition in his block. When the block is empty he has shot his target. No one in a group loads his rifle until the "commence firing" order is given and no one leaves his position on the firing line until the "cease firing" order.

Rewards: We have matches of our own as well as those conducted by the N.R.A. and Scholastic. Our team competes in the Annual Hearst Match. We put up small prizes such as shooting magazines, club emblems, and ammunition. Once a year we have a gold cup club championship match. Even a very small prize, a magazine or club emblem, creates a lot of interest and scores improve all along the line.

Dues and Finance: Our club dues are \$1. from the time a member joins until June. The school has a student fund into which all student activity money is paid. This fund, in turn, is used as capital with which to conduct all student activities. Just before Christmas we conduct a neck-tie sale which nets a profit. A club dance is now in the offing. As long as we put into the student fund as much money as we ask for, there is no complaint from the treasurer.

Club Emblems: We have a club emblem which is made on felt by silk screen process in our own school. When a student joins the club he is given his emblem, membership card, and two excellent booklets on riflery furnished by the N.R.A.

Instructors and Instructions: The author's shooting background of more than 30 years has helped considerably in the conduct of the club. But experience is not a necessity. We have a woman gym instructor who never shot a rifle until a year ago. In one year she has become an excellent shot and is now an outstanding coach with both boys and girls.

N.R.A. course

At least one instructor in every club should be an N.R.A. commissioned instructor. Whether he has had many years of experience or is a new comer, his knowledge will be greatly enriched by qualifying for an N.R.A. commission.

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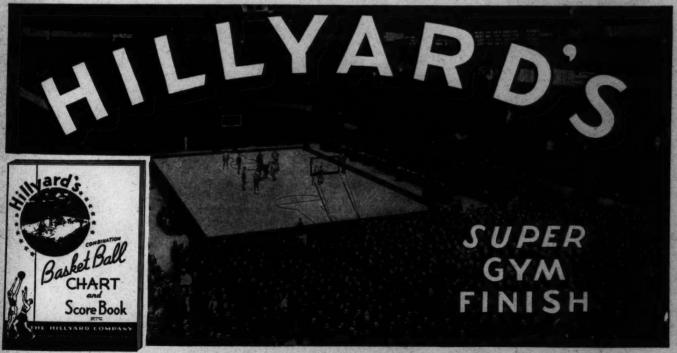
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HERE are three of the most splendiferous technical sports books we've seen in a long time. Prepared by the Training Division of the Bureau of Aeronautics, U.S. Navy, as teaching manuals for athletic officers, they offer a complete course on the respective sports.

Lt. John L. Pratt, father of the famous Barnes Dollar Sports Library, is the man behind these Navy texts, and a magnificent job he's done. The actual teaching material is concise, complete, clear, and the illustrations just wonderful.

For the most part, they consist of large, sharp moving picture sequences. Practically every fundamental skill is illustrated through this medium.

Each book is attractively bound (leather cover), and sells for \$2. We can't recommend them too highly. You may secure your copy or copies from the U.S. Naval Institute, Annapolis, Md.

PHYSICAL FITNESS THROUGH HEALTH EDUCATION FOR THE VICTORY CORPS. Pp. 98. Illustrated —photographs. U. S. Office of Education. 20c.

SIX important factors which contribute to health have been selected as the general objectives of the program of physical fitness through health education outlined in this manual. They are: Correction of remediable defects; prevention and control of disease; better nutrition; prevention of accidents; efficient daily routines; and sound mental attitudes.

The manual has been prepared to aid schools in the task of helping youth attain these objectives. It contains curriculum material for teachers and suggestions for administrative action required to implement a program of health education.

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Information is given regarding health problems which students are likely to face now or in the near future. Suggestions for action are also presented which should provide incentive for students to identify their own problems and work out solutions for them.

The manual has been prepared by a committee appointed by the Commissioner of Education with the collaboration of the Army, the Navy, the Public Health Service, and the Children's Bureau. It may be obtained for

20c from the Superintendent of Documents, Washington, D. C.

HANDBOOK ON PHYSICAL FIT. NESS FOR STUDENTS IN COL-LEGES AND UNIVERSITIES. Pp. 140. Illustrated—photographs and diagrams. U. S. Office of Education, 25c

THE Office of Education prepared this manual not only in response to requests for criteria by which to evaluate the adequacy of college programs that have already organized wartime physical fitness programs, but also as a source book for institutions which have not yet undertaken this responsibility.

The programs for men and women have been formulated in the belief that physical fitness includes not only physical qualities of strength, endurance and skill, but also a thorough knowledge and practice of the principles underlying health.

This program has been prepared by representatives of the Army, Navy, Public Health Service, Division of Physical Fitness of the Office of Defense Health and Welfare Services, colleges and universities, and the Office of Education. It may be purchased for 25c from the Superintendent of Documents, Washington, D.C.

STUNTS AND TUMBLING FOR GIRLS. By Virginia Lee Horne. Pp. 220. Illustrated — photographs and drawings. New York: A. S. Barnes & Co. \$3.

THE Wellesley College physical education instructor has prepared her text as a teaching manual for the physical education teacher or prospective teacher. It provides teaching materials suitable for beginning, intermediate and advanced tumblers in individual, dual and group activities. The text has been written in out-

The text has been written in outline form to eliminate extraneous wordage, and to attain complete analyses as concisely as possible, the equipment, values, directions, teaching suggestions, safety measures, and variations for each stunt are listed.

The author employs excellently worked-out and logical progressions, and simple and easy-to-use classifications. A wide range of interesting activities suitable for all age levels are given.

The material is extremely well organized under five headings: Teaching aids for stunts and tumbling, individual stunts and tumbling, stunts and tumbling for partners of like size, stunts and tumbling for partners of unequal size (top supported by base), and stunts and tumbling for groups of three or more, which includes pyramids and demonstrations.

Bucket Screens

(Continued from page 7)

and trailers. A big man should not play "center field" on offense.

10. Guarding the offensive pivot properly and using the arms to intercept passes or shots.

On defense, a tall player must be taught to give his man more room than the average player would give. This prevents him from being boxed in or bluffed by fakes and feints, while his taller reach still enables him to intercept the pass or shot. The extra foot space also gives him more leeway to match shifts and feints with his opponent, as he can watch both foot movements and the ball.

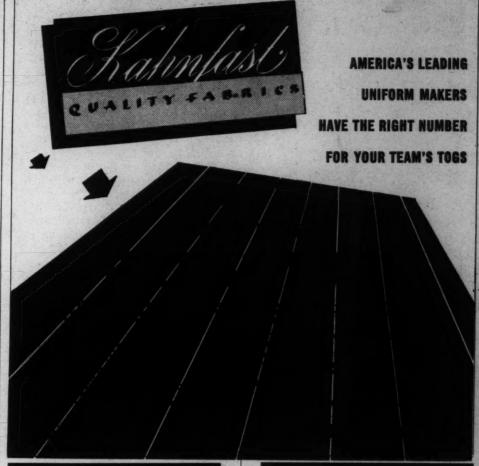
In the past, the East gave little opportunities to the unusually tall man, considering him too awkward and slow for its fast-moving ball-handling game. Then came the western teams with their four to ten tall, skillful players. This height advantage proved insurmountable because these tall performers, in addition to serving as powerhouses, possessed the best attributes of the smaller players. They were fast, clever dribblers, elusive and could screen.

Thanks to their western brothers, the East, in recent years, has tried to secure at least one tall operator to work the bucket. Its coaches are now much more patient with these giants.

High school men, seeing the benefits derived from height advantages, are urging all tall candidates to report in their freshman year. The smaller players, of course, will never be shut out as long as they have the technical equipment to make up for their lack of stature.

Success in screening plays comes with faithful practice. Every player should get a crack at the 1, 2, X1 and X2 positions in the accompanying plays. Drill with foursomes first, then add players. Give each offensive team 50 tries on half the court, concentrating on screening maneuvers only and counting the times they are successful. Do the same with the team on defense.

In this fashion, you will be better able to make adjustments and capitalize on the best qualities of the players. You can detect those who are best adapted to the bucket or screening post, those who can uncover, etc. During regular practices following drills, emphasize the fact that defensive weaknesses must be exploited for goals; do not restrict the players to screening tactics.



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Basketball Study

(Continued from page 25)

From the statistical evidence thus gathered, it would seem that the average player is very busy a good share of the time and that he must own plenty of strength and stamina to stand it.

It should also be remembered that no experimental effort such as this can hope to chart all the movements of a player. Studies of different players on different type teams show a considerable variation in movements and in the amount of running.

For instance, a "fire wagoner" was shown to run about 13 minutes but, beyond shooting a lot, did little else. On the other hand, one of the big favorites in a recent state tournament was revealed as a rather slow, infrequent mover. His motions and maneuvers, however, were apparently easy — at least for him—and were executed with a minimum of waste effort. Several of the better players proved they could accomplish more with less effort than the poorer players.

No one doubts the value of calisthenic drill as a builder of bodies, but it must be admitted that it is less interesting than playing games such as basketball, some of whose many movements are very similar to calisthenics and most of whose movements are executed faster, more vigorously and with better purpose. However, there still appears to be a place for both in the physical development of our youth.

SCREEN-SWITCH-DRIBBLE

When versed in all the options of pivot-post play, a pair of clever attackers can make it anathema to the defense. Here is a common game situation illustrating the point. The first thing to note is the way the attackers insure the feed pass. The ball-handler fakes inside, then whips the ball outside to the pivot, who comes in to meet the pass. No. 3 then cuts outside, sharply reverses direction and slices off the post.

The latter has studied his man, knows he will switch. So he fakes a return pass and waits for 3's guard to commit himself. The guard tries to follow his man by sliding behind the ball-handler. So the latter quickly pivots and dribbles in for an easy basket.



Physiology of Fitness

(Continued from page 11)

Twisting Sit-Ups, Partner Holding

5. Floor Touching and Upward Arm-Flinging, Alternately Right and Left.

In Jokl's18 government experiment a group of under-developed and physically unfit young men between 18 and 23 years of age were improved from 4.3 to 11.0% in the 3-mile run, 100-yd. dash, breath holding, and pulse rate simultaneously as their weight improved 6.15%.

Recently, considerable experimentation has been under way at the University of Illinois on improvement in a wide variety of motor fitness events. The greatest improvement, it has been found, usually occurs in the endurance events. For instance,19 Leg-Lifts and Sit-Ups improved 72.33%, V-Sit 64.61%, Mile Run 63.50%, Squat Stand for Time 46.65%, Chinning 37.55%, Push-Ups 27.57%, Dips on the Parallel Bars 24.13%, Sit-Ups 21.97%, Hops on Feet 15.95%.

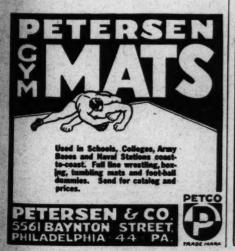
Such improvements are relatively great and show the great need for conditioning work in the basic physical fitness classes at the University of Illinois.

Improvement in endurance is no doubt very complex. Part of it is undoubtedly "organic" involving changes in blood, skeletal muscular tone, heart and respiratory muscle strengthening - all resulting in more and better blood to the muscles during exercise.

(Concluded on page 32)

"E. Jokl, E. H. Cluver and C. Goedvolk, training and Efficiency, Johannesburg, south Africa: The South African Institute for Medical Research, 1941. Pp. 188.

"T. K. Cureton, "Improvement in Motor timess Associated with Physical Education and Physical Fitness Clinic Work," Research Quarterly, 14: 154-157, (May, 1943).



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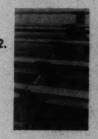
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ON PAGE 32 OPPOSITE THIS SPACE ARE OTHER LISTINGS AND FORM FOR SIGNATURE

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Steinhaus20 has emphasized that not all of the improvement should be credited to circulatory-respiratory changes because skill (or coordination) develops and results in less oxygen consumption. The "learning" of the muscles to work more efficiently, perhaps by developing more effective innervation and improved coordination of the nervous impulses which adjust the response of the muscle fibers to the effort, explains a large part of the improvement. Endurance performance is possibly a combination of "organic" capacity, neuromuscular training and will power.

Similar results are shown in the recent studies of Daubert21, Bookwalter22 and Hughes23.

Will power is always the key to improvement. Building stamina is a slow process of perseverancewillingness to take punishment day by day in endurance tests and practice. Usually endurance exertion is discontinued much too early due to slight fatigue, respiratory distress or slight pain in the side-producing a psychologic limit. The physiological limit is usually much beyond this stage.

²⁰A. H. Steinhaus, "Chronic Effects of Exercise," *Physiological Reviews*, 13: 103-147

ercise," Physiological Reviews, 13: 103-147 (Jan., 1933).

²¹R. B. Daubert, "A Physical Conditioning Program as Conducted at Michigan State College," Research Quarterly, 14: 175-183 (May, 1943).

²²Karl W. Bookwalter. "A Critical Analysis of Achievements in the Physical Fitness Program for Men at Indiana University," Research Quarterly, 14: 184-193 (May, 1943).

²³B. O. Hughes, "Test Results of the University of Michigan Physical Conditioning Program," Research Quarterly, 13: 498-511 (Dec., 1942).

Press Relations

(Continued from page 20)

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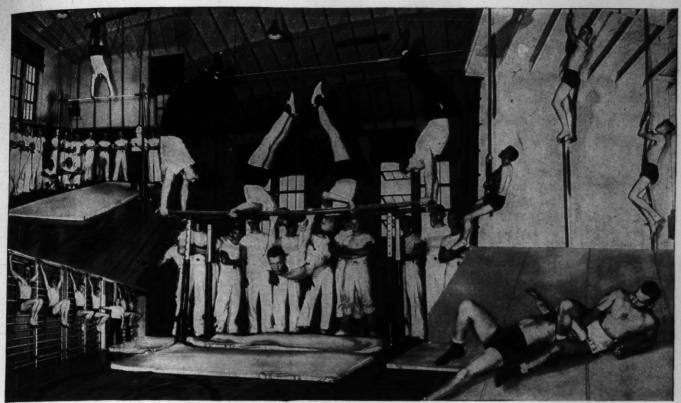
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High school athletics have done more in this country to teach teamment and the receiver of the Colden.

work and the meaning of the Golden Rule than any other one thing, but there should be a little more teamwork between the coaches and newspapers in the small towns.

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